VIA FACSIMILE TRANSMISSION 1-571-273-8300

Remarks

Claims 1-22 remain pending in the present application. It is respectfully submitted that the pending claims define allowable subject matter.

Claims 1-22 have been rejected under 35 USC 103(a) as being unpatentable over Despard (USP 6,310,295) in view of Glew et al. (USP 6,639,152). The undersigned respectfully traverses this rejection. It is submitted that the outstanding Office Action fails to set forth a prima facie case of obviousness because no legitimate motivation is provided that would have led the person of ordinary skill to modify Despard in a manner to include the claimed combination of a jacket and spline.

Claims 1, 10 and 19 define the jacket of the cable to include a spline that projects inward from an inner surface of the jacket, wherein at least a portion of the twisted pair is positioned between the spline and a center of the core and wherein the spline is in contact with the twisted pair to prevent relative movement of the jacket with respect to the twisted pair.

At the time of applicant's invention, there was no legitimate reason for the person of ordinary skill to modify Despard's cable to include the claimed spline configuration. Glew does not provide any such motivation, nor does the prior art as a whole. In the outstanding Office Action, it is acknowledged that Despard does not disclose a jacket comprising at least one spline. Instead, it is maintained that it would have been obvious to provide Despard's jacket with a plurality of splines "to allow specific spacing between the twisted pair of insulated wires and the inner surface of the jacket such that the electrical properties associated with the wires would be improved as taught by Glew." (Page 3 of the office action).

However, Glew does not provide any suggestion to provide splines on the jacket. Instead, Glew describes a cable having a smooth jacket that contains a separator. The separator includes separate channels, each channel of which holds one or more twisted pairs. The patent to Glew includes 22 drawings that illustrate approximately 20 different configurations **for the separator**. The vast majority of the text and drawings of Glew focus upon alternative structures for the separator. Figures 2A to 2C are the only drawings that even illustrate a jacket, which Glew describes to be "optional". In each of the numerous embodiments shown in Figures 1A,

1B, 1C, 2A, 2B, 2C, 3A, 3B, 3C, 3D, 4A, 4B, 5, 6A, 6B, and 7, Glew's **separator entirely isolates** the twisted pairs from a jacket.

Glew teaches that the separator is advantageous as "the anvil-shaped core support-separator of this invention provides a superior crush resistance to the protrusions of the standard "X" or other similar supports." (column 5, lines 41-43). The "anvil-shaped core better preserves the geometry of the pairs relative to each other and of pairs relative to the other parts of the cables". (column 5, lines 46-48). The spacing between pairs, **spacing away from jackets**, and balanced spacing all have an effect on the cable performance (column 6, lines 28-31). Glew's anvil shaped core forms separate channels that hold twisted pairs in a confined space to achieve the desired spacing, including a **spacing away from the jacket**.

Glew provides a very limited discussion of grooves and only in connection with the addition of the grooves within the channels and on the exterior of the separator. Glew describes, in connection with the embodiment of Figure 1B, the addition of grooves on the exterior of the separator and in the interior of the channels of the separator. No where does Glew discuss, or suggest, any reason to relocate the grooves from the separator onto the interior of the jacket. It should be noted, that the only embodiment in which Glew discusses grooves is with respect to Figure 1B, and in the embodiment of Figure 1B, **the twisted pairs are entirely isolated from the jacket.**

In the outstanding Office Action, column 10, lines 38-41 of Glew is cited as allegedly teaching that the electrical properties of the wire would be improved by providing grooves on the inner surface of the jacket. It is submitted that reliance on column 10, lines 38-41 is misplaced as this section of Glew does not stand for the alleged proposition. In fact, Glew does not provide any suggestion to add grooves to the inner surface of the jacket. Thus, it is submitted that no legitimate motivation has been provided that would have led the person of ordinary skill to modify Despard in a manner that would include the claimed spline.

Further, it is submitted that if the teachings of Despard and Glew were combined, at best they would have motivated the person of ordinary skill to replace Despard's separator with Glew's separator. Glew notes in the background section that conventional cables include a standard "X" or "+" shaped support (column 2, lines 7-12). Despard's cable uses an "X" or "+" shaped separator. Glew teaches that the conventional X and + shaped separates experienced

certain disadvantages that Glew overcomes by providing a separator that has an anvil shape. To the extent that the person of ordinary skill would combine the teachings of Despard and Glew, such a combination would necessarily include Glew's entire separator with or without grooves in the channels of the separator. There is absolutely no reason to modify Despard's cable, yet retain Despard's separator, and place Glew's grooves not on Despard's separator, but on Despard's jacket. Similarly, if Glew's separator is added to Despard's cable there is absolutely no reason to move Glew's grooves out of the channels onto the jacket, particularly given that in most of Glew's embodiments, the separator entirely isolates the twisted pairs from the jacket. Thus, the combined teachings of Despard and Glew fail to teach or suggest the claimed invention.

The claimed cable affords several advantages over the prior art. For example, a cable containing the anvil-shaped separator of Glew would be extremely stiff and would experience problems in controlling impedance. In many applications, it is desirable that a cable having a twisted pair arrangement should exhibit a certain impedance. The impedance of the cable is impacted by the insulation properties of the materials within the cable. Air has very good insulation characteristics. Any cable that includes Glew's anvil shaped separator would have very little space left for air within the jacket. Thus, cables with Glew's anvil shaped separator would experience difficulties in achieving a desired impedance.

In contrast, the claimed cable does not utilize the complex and bulking anvil shaped separator design of Glew. The claimed cable is simple, flexible and readily achieves various desired impedance characteristics. The claimed cable may (or may not) include a separator. When a separator is used, the claimed cable is able to use a less bulking separator (as compared to that of Glew), while the spline prevents the twisted pairs from moving relative to the jacket.

In view of the foregoing, it is submitted that the pending claims define allowable subject matter. Should anything remain to place the present application in condition for allowance, the examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully Submitted,

Date: October 17, 2006

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